



# Embracing Ambiguity in the Workplace

# Introduction

To remain relevant in the workplace both leaders and employees need to be able to embrace ambiguity. Embracing ambiguity enables organisations to seize opportunities, take calculated risks to tackle previously uncharted territories, back themselves when they don't have all the answers, diversify products and services, all the while remaining profitable. The ability to embrace ambiguity is related to a range of positive behaviours in organisations, such as more effective and efficient problem solving and decision making and an increased appetite for creativity and risk taking. The increasing rate of change makes this ability even more critical in organisations.

The starting point to embracing ambiguity is to identify an individual's level of tolerance of ambiguity (TOA), and then the challenge is to help these individuals identify how this tolerance might be increased. Individuals who have a higher tolerance of ambiguity will be more productive and responsive in the volatile, uncertain and complex world of work, and experience increased job satisfaction, and overall wellbeing.

Change2020 is proud to have partnered with Queensland University of Technology (QUT) Business School to conduct research on TOA in the workplace. This report presents the key findings of the research which has enabled the development of a multidimensional questionnaire to comprehensively assess TOA. It also describes habits identified in the research that when built into daily routines will help individuals build their tolerance of ambiguity.

We hope this report will provide you with a starting point to discuss ambiguity in your workplace and positive ways to deal with it.

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May 2017



# Background

## What is Ambiguity?

Organisations today are in a continuous state of uncertainty due to strong competition, constant technological advancements, complex consumer behaviour, rapid globalisation and changes stimulated by a desire for flexible work patterns.

In recent years, occupational changes have occurred. Work hours and locations have become more flexible, and organisations have implemented numerous changes such as downsizing, restructuring and outsourcing. Along with these changes, new positions have been created and employees must now take on a variety of tasks as a result of new or expanded roles. These changes to the work environment means that workers are regularly exposed to unclear situations, people with different educational and cultural backgrounds, and problems that have no definite solution. In other words, the modern work environment is characterised by extensive ambiguity.

An ambiguous situation or context is defined as one which

***“cannot be adequately structured or categorised by an individual because of the lack of sufficient cues”*** (Budner, 1962, p. 30).

An ambiguous situation is one which could be unclear or confusing, or could be understood in more than one way. This is a common occurrence in today’s world of work, so understanding how to best work with ambiguity is critical.

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*“The path in front of you is rarely a straight line. It’s full of bumps... Embrace the bumps in the road.”*

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*-Ellen Bennett*





## What is Tolerance of Ambiguity (TOA)?

Tolerance of ambiguity (TOA) refers to the extent to which individuals are naturally comfortable with ambiguous situations. Tolerance of ambiguity has been defined as:

***“the tendency for an individual to perceive ambiguous situations as desirable”*** (Budner, 1962, p.29).

A person with a high tolerance of ambiguity is comfortable with ambiguous situations and perceives them as desirable, challenging, and interesting, and strives to resolve problems or situations that appear to be complex or novel.

The way an individual interacts with ambiguous situations (e.g. perceives, interprets, reacts, adjusts) ultimately defines their tolerance of ambiguity level. Measuring TOA in the workplace can help to identify those who are likely to excel in ambiguous environments as well as those likely to need more structure. It will also help identify those with the capacity to develop their tolerance of ambiguity further.



## Why is TOA Important in the Workplace?

Employees' tolerance of ambiguity has been identified as a critical skill that may enhance an organisation's success in changing environments.

In the workplace, levels of TOA have been found to be positively related to many behaviours, attitudes and characteristics that may positively influence the overall success of an individual including:

- ✓ Job performance
- ✓ Decision making
- ✓ Creativity
- ✓ Critical thinking
- ✓ Risk acceptance
- ✓ Job satisfaction
- ✓ Organisational commitment
- ✓ Health and wellbeing

For organisations, these factors have flow on benefits which include:

- ✓ Lower absenteeism
- ✓ Improving attitudes towards organisational change
- ✓ Lower staff turnover
- ✓ Effective leadership
- ✓ Higher job performance



# ABOUT THE RESEARCH

## Research Purpose

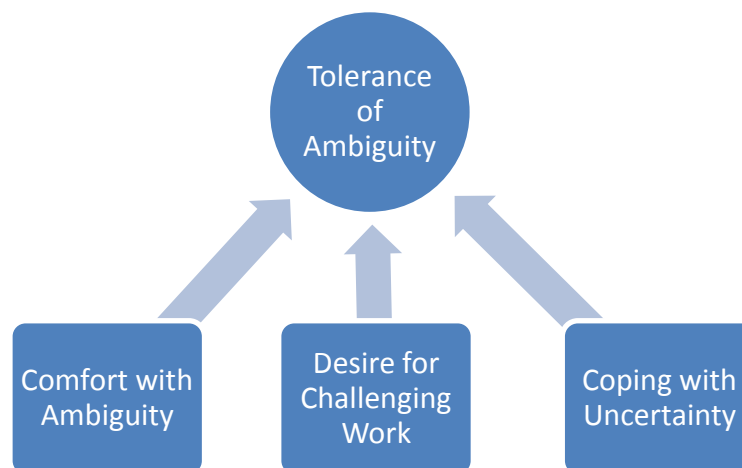
There are existing measurement tools for TOA, however these scales are quite general and are often applied to social settings and do not adequately assess TOA in the workplace. These scales have also been criticised for weak reliability and validity, and there is suggestion that some questions do not evoke thoughts of ambiguity at all. The purpose of this study was to develop a new practical assessment tool to measure an employee's tolerance of ambiguity in a workplace setting.

## Research Method

To develop a new measure of TOA, a set of 111 items were compiled. These items were either adapted from existing measures of TOA or created for the purposes of this project and worded to reflect ambiguity in a workplace setting. The TOA items were combined with other measures of personality and related constructs to form a large, 228-item questionnaire which was administered online and received 328 valid responses. The research was granted ethical approval by the QUT Human Ethics Committee (QUT approval number: 1700000084) in line with standard ethical guidelines and the National Statement on Ethical Conduct in Human Research (Australian Government, 2007).

## Results

Statistical analysis was conducted to test the items and 50 items were included in the final TOA measure. There were three main factors in the new measure of TOA as shown in Figure 1. Analysis was also conducted on the additional items such as creativity, personality and leadership to determine if there were relationships between people with high levels of TOA and other factors.



*Figure 1 - Three main TOA factors emerging from the research*

# THE TOLERANCE OF AMBIGUITY SCALE

The research identified three factors that contribute to an individual's overall TOA and these factors are now able to be measured using a questionnaire. The overall TOA score reflects an individual's ability to accept situations that are unclear, uncertain, novel or complex and strive to work effectively within this environment. This overall result can then be broken down further into separate scales, each with its own sub-scales as outlined below:

Scale and Sub-scales	Description
<b>1. Comfort with Ambiguity</b>	<b>This scale indicates the ease individuals have with ambiguous situations at work, especially relating to relationships, unfamiliar situations, different ways of thinking or difficult problems.</b>
Comfort with Difficult Problems	A willingness to take on unclear tasks or to start new tasks or projects even if there is uncertainty about the solution or outcome and how it will be achieved.
Interpersonal Comfort	Feeling comfortable when relating to unfamiliar or unknown co-workers/colleagues and able to navigate a variety of different types of interpersonal relationships in the workplace.
Moral Perspective	The ability to view situations as not simply good or bad, right or wrong, or through stereotypes, but prepared to accept "shades of grey". To see behaviours and situations from multiple perspectives.
Comfort with Unfamiliarity	Comfortable in new situations in which there are no familiar cues. The willingness to take on different work tasks over engaging in routine and habitual activities.
<b>2. Desire for Challenging Work</b>	<b>This scale reflects the extent to which an individual desires or embraces complexity, and is eager to solve problems and to take risks in work situations.</b>
Embracing Complexity	Desire to engage in complex work situations and problems in which there is a great number of cues to take into account, as opposed to the need for simple, predictable or regular situations.
Embracing Problem Solving Opportunities	Ability to embrace unclear or new work assignments or problems with limited information and to create structure and gain the information needed to solve problems.
Risk Taking Orientation	Attracted to situations at work where there are opportunities to take risks and do things never done before. Being encouraged to take a chance even when there is a high possibility of failure is valued, seeking variety in work and preferring to risk failing over being bored.
<b>3. Coping with Uncertainty</b>	<b>This scale relates to the mechanisms an individual might use to cope with ambiguity and uncertainty in the workplace including using communication, reasoning and plans to minimise ambiguity.</b>
Desire for Clarity	The need to seek clarity as a way of managing ambiguity, by focusing on straightforward reasoning, clear communication and a shared understanding of goals.
Comfort with Uncertainty	At ease with situations that are uncertain, open to new ideas, comfortable working with a range of individuals and willing to engage with people who do not necessarily have all the answers.

# HABITS OF MIND:

## WAYS TO BUILD A TOLERANCE OF AMBIGUITY

As well as the development of the TOA Scale, a range of other traits and behaviours that relate to TOA were tested. From this analysis, eight habits that individuals could focus on to develop their level of TOA in the workplace were identified:



### Master Mindfulness

One of the key behaviours related to TOA is mindfulness. This relates to someone being able to regulate and control their emotions, to handle stress and be in the present moment. They also have a mental state of openness, awareness and focus. The ability to master mindfulness is particularly important for people who score low on the Comfort with Ambiguity Scale.



### Be Assertive

Assertive behaviours including taking charge or control of situations and not waiting for others to lead, were found to be related to someone with high levels of TOA. These people seek to influence others and are prepared to present their opinions and have a say. Assertiveness should be a focus for those who score low on the Desire for Challenging Work Scale.



### Focus on What Matters

To assist in developing levels of TOA, individuals should seek to minimise distractions and noise, and identify and focus their attention on important tasks. This could include setting objectives and strategies to achieve by breaking down problems and issues into more manageable pieces. It might also include identifying unimportant or irrelevant details that can be overwhelming in an ambiguous situation. Focusing on what matters is a habit that should be cultivated in people who score low on both the Comfort with Ambiguity Scale or the Coping with Uncertainty Scale.



### Practice Agility

An important trait displayed by people with high levels of TOA is their ability to be flexible when change or uncertainty is present in the workplace. They have an ability to expect success however they have realistic expectations and do not let their desire for perfection impede their progress. In a practical sense, it is important to not get lost or bogged down in the details and to rewire mindsets to accept that perfection is not obtainable nor a worthy endeavour. Developing one's flexibility and agility in the workplace is particularly important for people who score low on the Coping with Uncertainty Scale.





### Cultivate Curiosity

Cultivating curiosity in the workplace was also found to be a trait that people could focus on to develop their TOA. These behaviours centre around interacting with others and include effectively communicating and listening to co-workers; when problems arise, asking questions that encourage curiosity and if confronted with resistance from others, asking questions that lead to identifying possible solutions rather than dwelling on the past. Collaboration is also important including behaviours such as encouraging participation from others, posing questions, creating strong professional relationships and networks for diversity of thought, sharing ideas and being open to connect the ideas of different people. Cultivating one's curiosity is ideally important for people who have low scores on their Desire for Challenging Work Scale and the Coping with Uncertainty Scale.



### Act Courageously

The ability to have courage at work was found to be a trait of someone with high TOA. Courage is exhibited in people who are able to face their fears, step out of their comfort zone and back their own opinions and beliefs. They are able to stand up for others, tell the truth even when unpopular and speak their mind freely even if there might be negative consequences. Courageous people are able to face uncomfortable or awkward situations and are comfortable with not knowing all the answers. Developing courage in the workplace is particularly important for those who score low in their Desire for Challenging Work Scale.



### Let go and Move on

It is important for employees to not dwell on mistakes but to learn from them. This was an important trait that was evident in people who had a high TOA. These people are able to “unhook” themselves from the past and not dwell on missed opportunities, hurts or mistakes. They are also able to not blame themselves for mistakes and are not people to have regrets or rethink too much. Once they make a decision they also don't look back. The habit of letting go and moving on is particularly important for those who displayed low levels on the Comfort with Ambiguity Scale.



### Think Differently

TOA can also be cultivated by developing ones creativity at work. When problems arise, people with a high TOA were able to use their imagination to think outside the box as well as question existing ways of doing things. Their aptitude to challenge the status quo and draw on a range of ideas assisted them in navigating ambiguous situations. Results showed that developing creativity will particularly assist people if their overall TOA score is low.

# COMMON QUESTIONS ABOUT TOA

There are often questions asked about TOA and its relationship to a range of other attributes. Here are answers to some of these common questions:

## *How does age relate to TOA?*

Our research showed that as a person gets older, their tolerance of ambiguity also increases. For overall TOA total scores, Baby Boomers (born 1946 to 1964) were significantly higher than both Gen X (born 1965 to 1980) and Gen Y (born 1981-2000). Gen X was significantly higher than Gen Y. The same pattern was found with Comfort with Ambiguity (i.e. Baby Boomers were most comfortable, followed by Gen X) and for Coping with Uncertainty. There were no generational differences in Desire for Challenging Work.

## *How does gender impact on TOA?*

We found no significant gender differences on overall Tolerance of Ambiguity score or on any of the subscales. Males and females are remarkably similar on all TOA scores.

## *How does a person's education impact on their TOA?*

We found that the more educated employees were, the higher they tended to score on TOA overall. In particular, they tended to score higher on Desire for Challenging Work.

## *Is the industry in which someone works related to levels of TOA?*

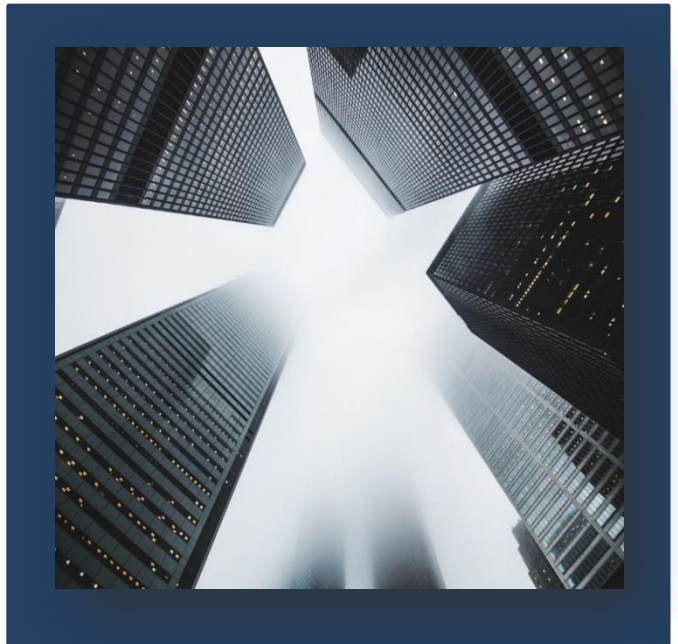
The only significant difference was in the Desire for Challenging Work Scale. The following industries tended to be high: Agriculture, forestry and fishing, mining, manufacturing. The following industries tended to be low: Construction, wholesale trade, public administration, safety and defence.

## *Are there any occupations where people have higher levels of TOA?*

The only significant difference was in the Desire for Challenge Work Scale. Occupations highest in TOA were media and legal, whilst administration and clerical workers were lowest.

## *Are people in management/supervisory positions more likely to have a higher TOA?*

Managers/supervisors have significantly lower average scores on the Comfort with Ambiguity scale and significantly higher scores for Desire for Challenge Work however there was no notable difference between managers and non-managers on TOA overall.



### ***How is creativity related to TOA?***

Results found a very strong relationship between TOA and creativity.

### ***How is emotional intelligence related to TOA?***

The study revealed that those with higher TOA also tended to display higher levels of emotional intelligence.

### ***Does personality have an impact on TOA?***

Personality is a complex issue. It was measured using a 20-item widely recognised “Big 5” Factors of Personality scale. The five dimensions are described below (Barrick & Mount, 1991):

- Extraversion: ambition and sociability
- Neuroticism: anxious, depressed, angry, embarrassed, emotional, worried and insecure
- Agreeableness: courteous, flexible, trusting, good-natured, cooperative, forgiving, soft-hearted, and tolerant
- Conscientiousness: dependability (being careful, thorough, responsible, organised and planned) as well as hardworking, achievement-oriented and persevering
- Openness to Experience: imaginative, cultured, curious, original, broad-minded, intelligent and artistically sensitive

The results of this study found that TOA is positively related with personality traits of Extraversion, Agreeableness, Conscientiousness and Openness to Experience. It is negatively related with Neuroticism.

### ***How does TOA impact on wellbeing?***

Our results showed that those who were higher in TOA also tended to score higher on a measure of wellbeing. An interesting note however; when a person has a job that is low in ambiguity and they themselves are high in TOA, their wellbeing is negatively impacted. In contrast, people with low TOA do not suffer lower wellbeing when they have high ambiguity in their job. However, it may still mean that they are not as effective as they could be in their role if they were more tolerant of ambiguity.

People with a high score on the Desire for Challenging Work Scale, suffer from low wellbeing when they do not have high ambiguity in their job.

### ***What is the relationship between TOA and problem solving?***

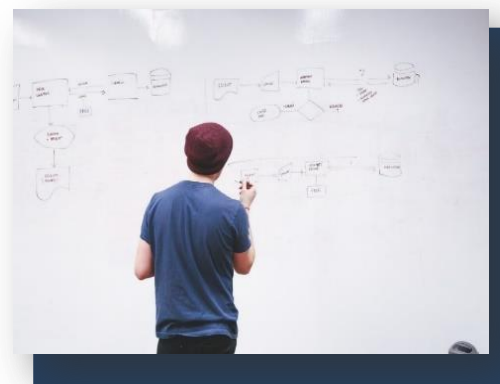
Results showed that people who scored higher in TOA also scored higher on a measure of complex problem solving.

### ***Does TOA have an impact on teamwork (participative decision making)?***

Yes. The study demonstrated that employees who scored higher in TOA exhibited higher teamwork tendencies.

### ***Is TOA related to leadership?***

The study found that people who scored higher in TOA overall also scored higher on a measure of leadership. Specifically, individuals scored high in their Desire for Challenging Work and Coping with Uncertainty.



# APPENDIX 1. DEMOGRAPHIC INFORMATION

## Age and Gender

Of the 328 valid participants in the study, 53% were male and 47% were female. The average age was 41 years, with 24% of participants being Baby Boomers, 34% Generation Y and 42% Generation X (see Figure 3 below).

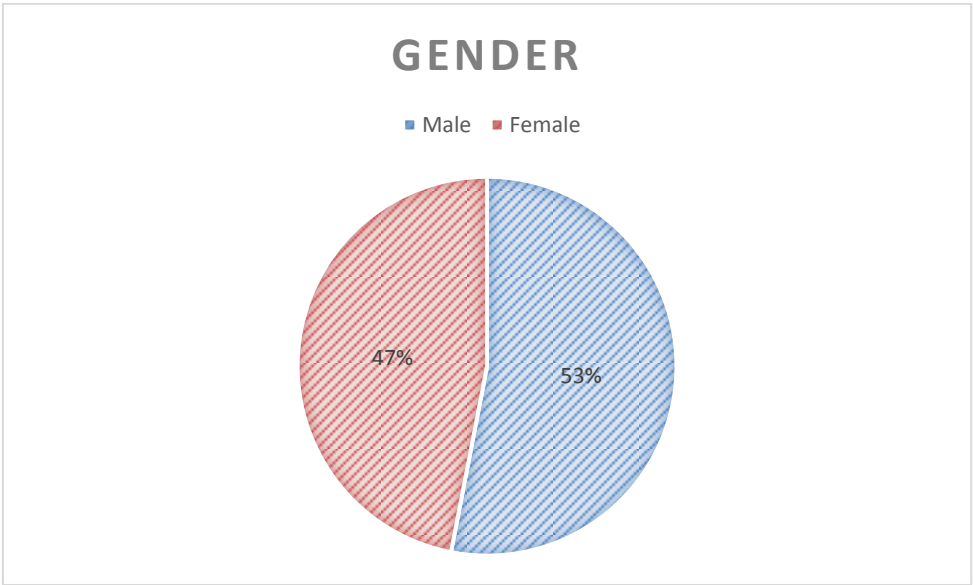


Figure 2 - Gender of Participants

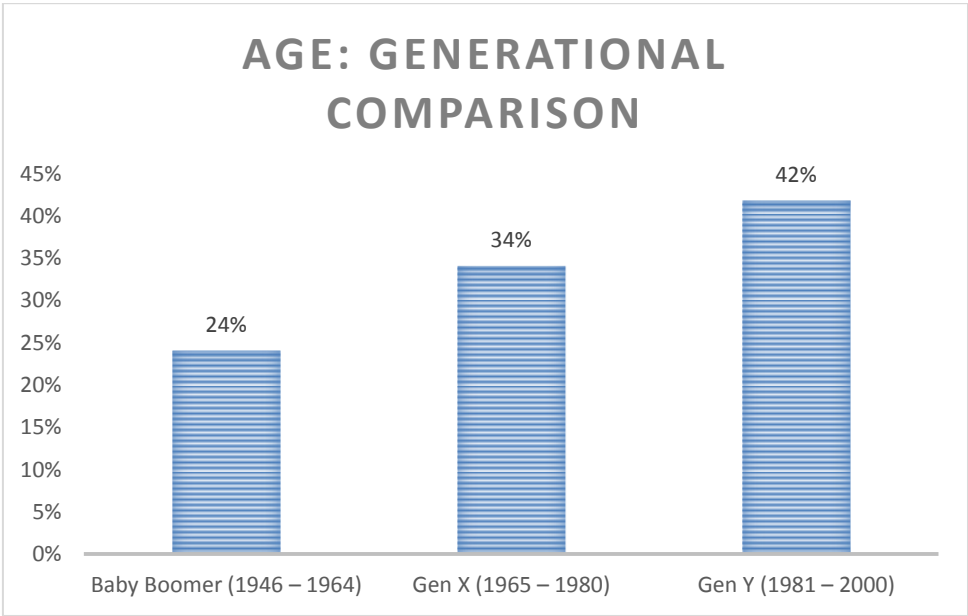


Figure 3 - Generation Comparison

## Employment

Of the participants in the study, 72% of the respondents were full time employees, while 25% were part time and 3% engaged in casual employment (see Figure 4). When asked about their role at work, more than half of participants (55%) had a supervisory role (see Figure 5).

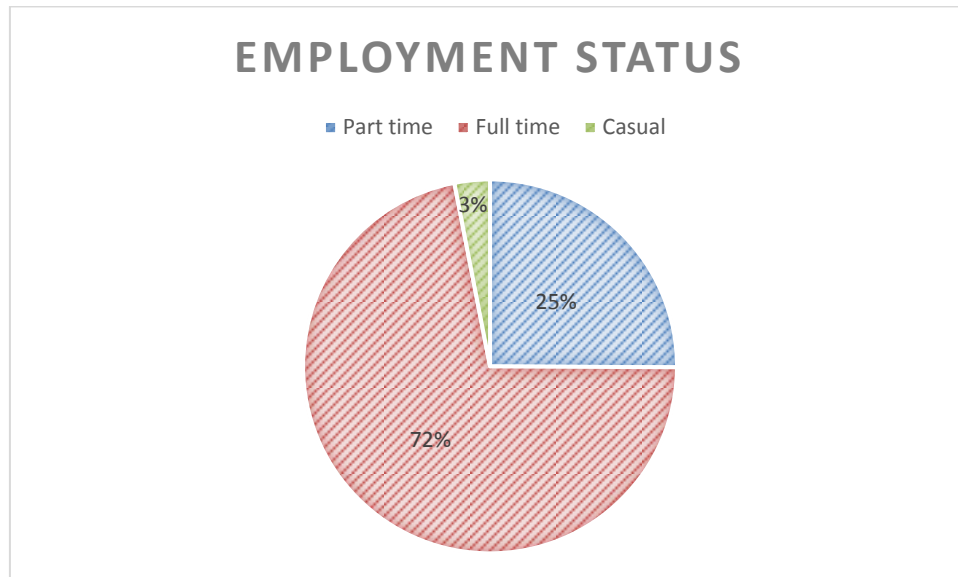


Figure 4 - Employment status of participants

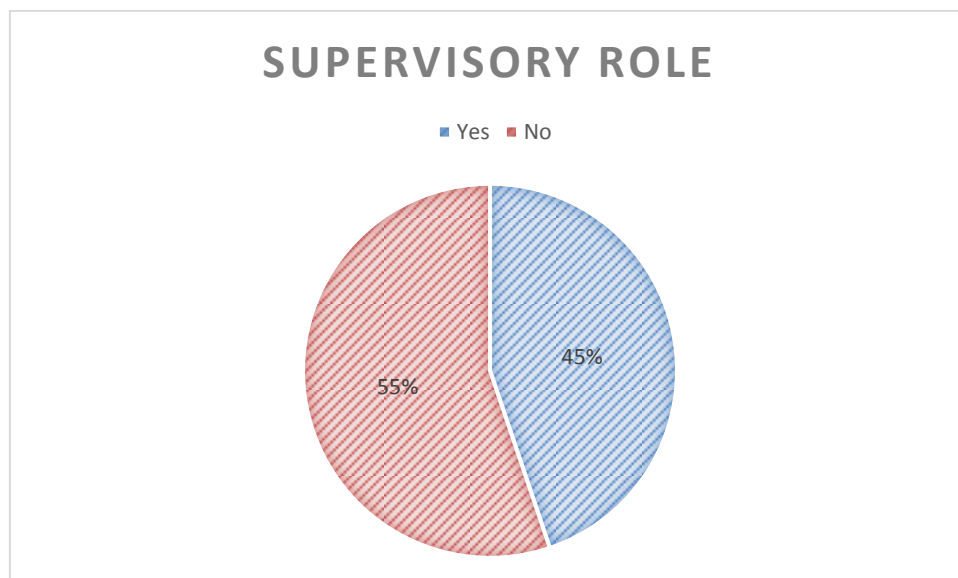


Figure 5 - Supervisory role



## Occupation and Industry

Participants were also asked to identify the occupation and industry in which they are currently employed. As shown in Figure 6, 27% of participants were a manager or supervisor, with 22% employed in an Administrative or Clerical position. Professional, Scientific and Technical Services was the most identified industry (13.7%), followed by Public Administration Safety and Defence with 12.2% of participants (see Figure 7).

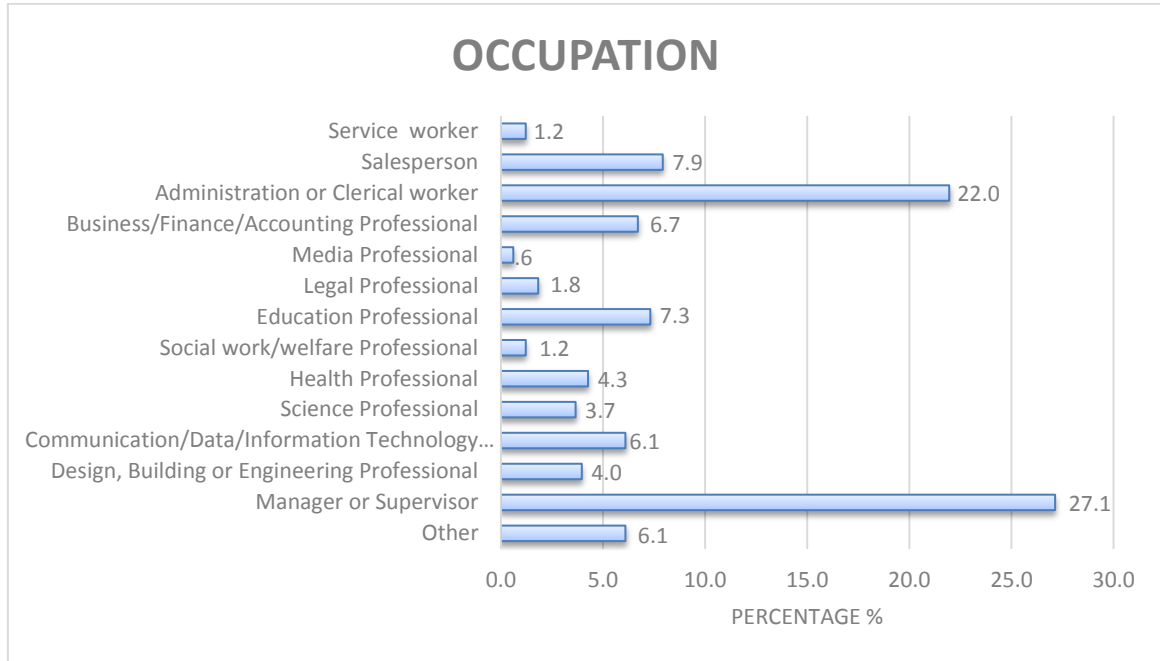


Figure 6 - Occupation of participants

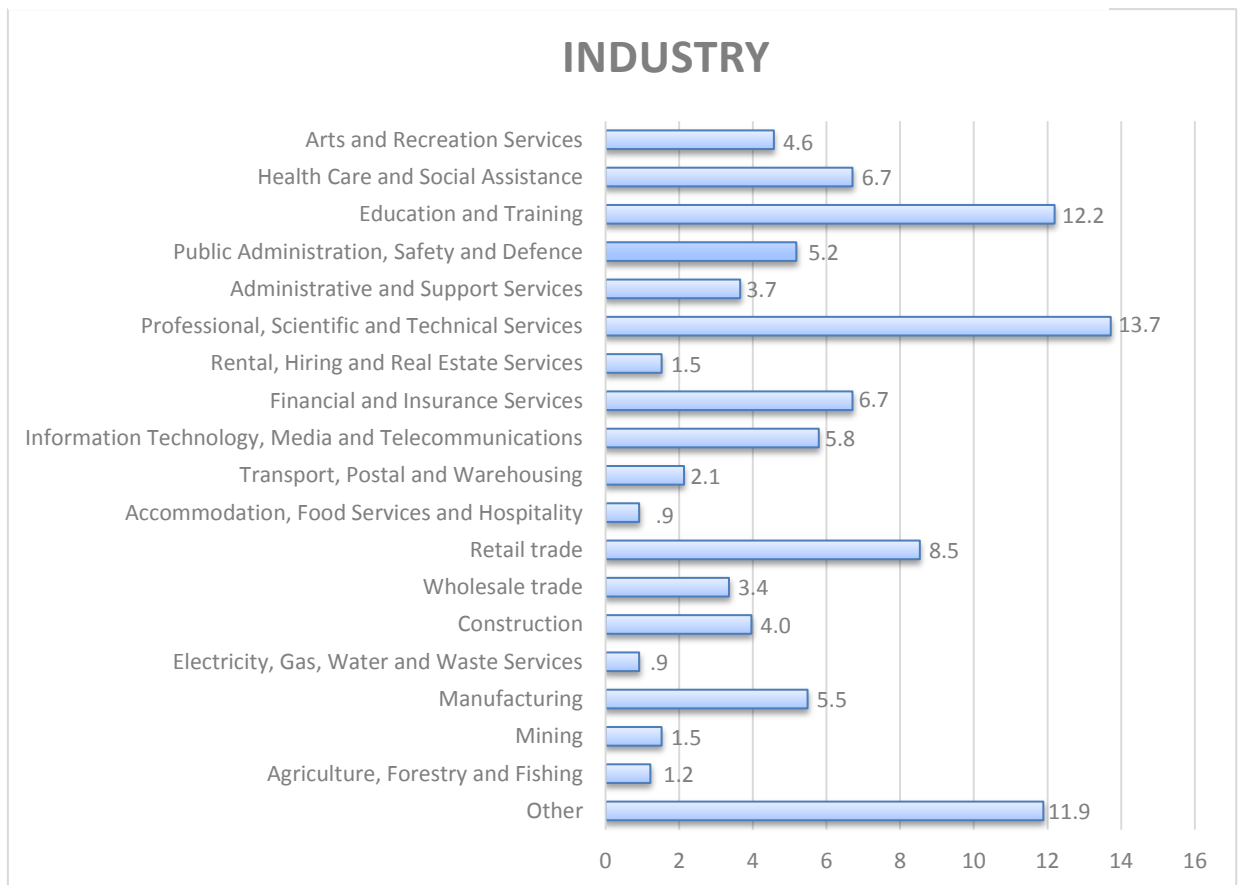
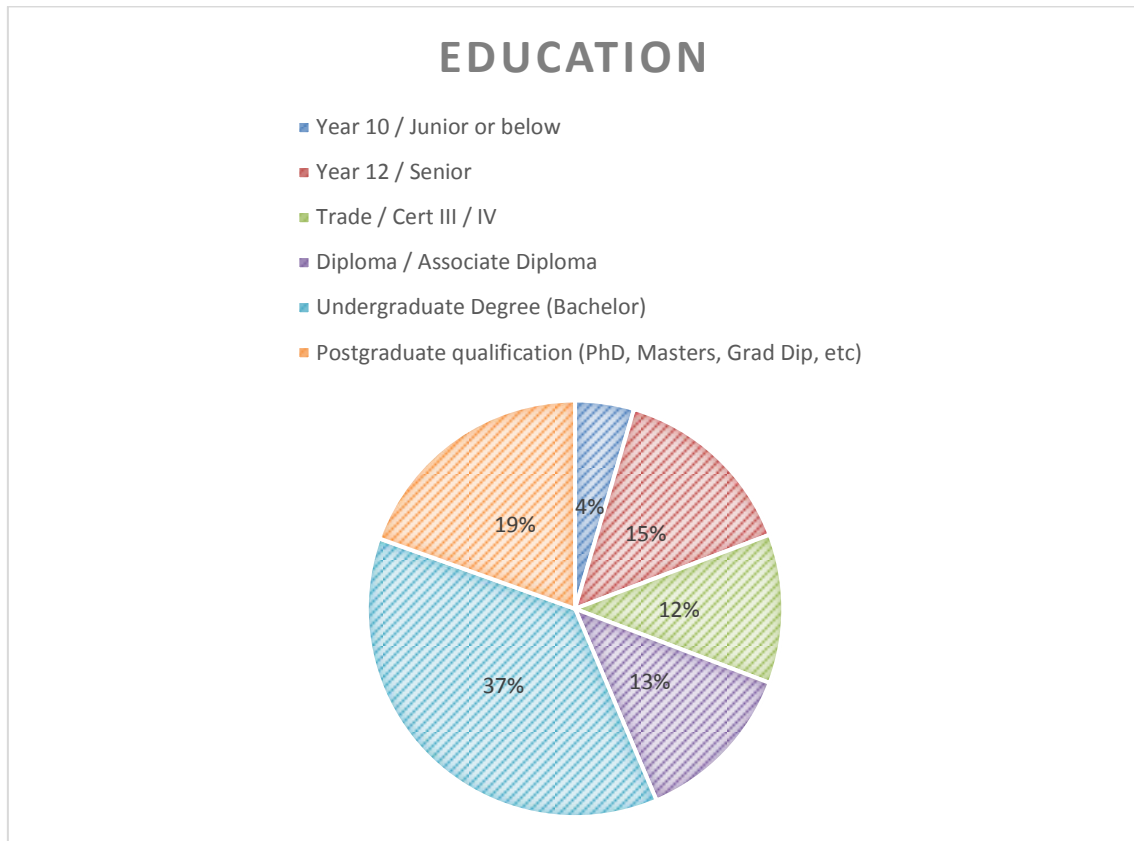


Figure 7 - Participants' industry

## Education

When asked about level of education, 37% of respondents had completed an undergraduate degree (Bachelor), with a further 13% having gone on to complete postgraduate qualifications of a PHD, Masters or Graduate Diploma (see Figure 8 below).



*Figure 8- Education level of participants*

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